

REMARKS

This is a full and timely response to the outstanding final Office Action mailed February 12, 2004. Reconsideration and allowance of the application and pending claims 1 - 35 are respectfully requested.

I. Examiner Interview

Applicants wish to express their sincere appreciation for the time Examiner Havan spent with Applicants' attorney, during a telephone discussion on March 9, 2004, regarding the outstanding Office Action. The interview specifically pertained to the patentability of claims 1 - 3, 6, and 9 - 11. While agreement was not reached regarding the patentability of these claims, Applicants appreciate the cooperation exhibited by the Examiner to further explain the Office Action rejection in order to advance the prosecution of this application.

II. Claims 1 - 35 are Patentable Over *Rosenberg*

The Office Action rejects claims 1 - 35 under 35 U.S.C. §102(e) as allegedly being unpatentable over U.S. Patent 6,317,116 to Rosenberg *et al.* ("*Rosenberg*"). For the reasons set forth below, Applicants submit that the rejection should be withdrawn and the claims allowed.

Independent Claim 1

Independent claim 1 is patentable over *Rosenberg* for at least the reason that *Rosenberg* fails to disclose, teach or suggest each and every limitation of claim 1.

For example, *Rosenberg* does not teach, suggest, or disclose the step of "***displaying a target area containing the first image object selected***" as recited in the method of claim 1. The Office Action apparently equates an image object with "icons, pull-down menu items, and graphical buttons" as well as any other "images appearing on the display screen which the

user may select with a cursor to implement a function of an application program or operating system, such as displaying images, executing an application program, or performing another computer function.” (Office Action, pgs. 2 – 3). The Office Action further alleges that targets “are defined region in the GUI 2 which a cursor may be moved by the user that are associated with one or more forces and which are typically associated with graphical objects of a GUI.” (Office Action, pg. 2). Additionally, the Office Action alleges that “such targets can be associated with, for example, graphical objects such as icons, pull-down menu items, and graphical buttons,” and further alleges that “a target usually is defined as the exact dimensions of its associated graphical object, and is superimposed and ‘attached’ to its associated graphical object such that the target has a constant spatial position with respect to the graphical object.” (Office Action, pg. 2).

Despite the Office Action’s detailed explanation as to the definition of “a target area,” Applicants submit that even assuming, *arguendo*, that a target area is as alleged, *Rosenberg* does not disclose that such a target area is ***displayed*** as required by the claim language. Rather, *Rosenberg* discloses, at most that “ ‘***targets, as referenced herein are defined regions in the GUI 300***’ to which a cursor may be moved by the user that are associated with one or more forces and which are typically associated with graphical objects of GUI 300.” (*Emphasis added*, col. 14, lines 38 – 41). A “region in the GUI” is not equivalent to “displaying a target area.”

Further, Applicants’ claim 1 recites “displaying a target area ***containing the first image object selected.***” Thus, “the first image object” and “the target area” are two separate elements, and the target area is “containing the first image object selected.” Therefore, it would be improper for the Office Action to allege that a single element in the *Rosenberg* reference, such as an icon, is equivalent to both “a first image object” and “a target area.”

Therefore, *Rosenberg* does not teach, suggest, or disclose the step of “displaying a target area containing the first image object selected” as recited in claim 1.

Claim 1 is patentable over *Rosenberg* for at least the additional reason that *Rosenberg* does not teach, suggest, or disclose the step of “***modifying the displayed target area such that the target area contains the first and second image objects.***” As an initial matter, as discussed above, *Rosenberg* does not even disclose a “displayed target area.” Rather, the alleged targets are merely “associated” with a displayed icon.

Even assuming, *arguendo*, that *Rosenberg* does disclose a “displayed target area,” *Rosenberg* simply does not disclose “***modifying the displayed target area***” at all. Rather, the alleged target “is superimposed and ‘attached’ to its associated graphical object such that the target has a ***constant spatial position*** with respect to the graphical object.” (*Emphasis added*, col. 14, lines 46-48).

Even more, assuming, *arguendo*, that *Rosenberg* does disclose “modifying the displayed target area,” *Rosenberg* does not disclose that the displayed target area is modified “such that the target area ***contains the first and second image objects***” as recited in claim 1. Thus, *Rosenberg* does not disclose, teach, or suggest “modifying the displayed target area such that the target area contains the first and second image objects” as recited in claim 1.

Accordingly, and for at least these reasons, Applicants respectfully submit that independent claim 1 defines over *Rosenberg*, and therefore, should be allowed. Furthermore, because independent claim 1 is allowable over the prior art of record, dependent claims 2 – 5 are allowable as a matter of law for at least the reason that they contain all the features and elements of independent claim 1.

Dependent Claim 2

The method of claim 2 recites that “*the step of modifying the displayed target area comprises centering the target area with respect to the first and second image objects selected.*” The Office Action directs the Applicants to column 14, lines 34 – 63 of *Rosenberg* as disclosing the alleged claim elements. However, Applicants have closely reviewed this section of text, as well as the remainder of the text of *Rosenberg*, and have not found anything that corresponds to “centering the target area with respect to the first and second image objects selected” as recited in claim 2.

At most, *Rosenberg* discloses that “the entire screen or background of GUI 300 can also be considered a ‘target’ which may provide forces on user object 12.” (Col. 14, lines 60 – 62). However, even if the entire screen or background is considered to be equivalent to a target, *Rosenberg* simply does not disclose that the entire screen or background is centered “with respect to first and second image objects selected.” Thus, *Rosenberg* does not disclose, teach, or suggest that “the step of modifying the displayed target area comprises centering the target area with respect to the first and second image objects selected” as recited in claim 2. Accordingly, and for at least these reasons, Applicants respectfully submit that dependent claim 2 defines over *Rosenberg* and, therefore, should be allowed.

Dependent Claim 3

Dependent claim 3 further defines that “*the step of modifying the displayed target area comprises displaying the target area such that the first and second image objects are contained within the target area and a maximum number of the image objects not selected are contained in the target area.*” As an initial matter, as discussed above in relation to claim 1, *Rosenberg* does not disclose “modifying the displayed target area,” and the claim should be allowed for this reason alone.

Further, the Office Action directs the Applicants to col. 14, lines 34 - col. 15, line 7 of *Rosenberg* as disclosing the alleged elements of claim 3. However, Applicants have closely reviewed this section of text, as well as the remainder of the text of *Rosenberg*, and have not found anything that corresponds to “the step of modifying the displayed target area comprises displaying the target area such that the first and second image objects are contained within the target area and a maximum number of the image objects not selected are contained in the target area” as recited in claim 3. Accordingly, and for at least these reasons, Applicants respectfully submit that dependent claim 3 defines over *Rosenberg* and, therefore, should be allowed.

Independent Claim 6

Applicants submit that *Rosenberg* does not disclose, teach, or suggest, *and the Office Action has not even alleged Rosenberg discloses*, each and every element of independent claim 6.

As an initial matter, Applicants submit that the Office Action has ***not even alleged that each and every element of independent claim 6*** is disclosed in *Rosenberg*. The Office Action alleges that “RE claims 6, 14, 19, and 27 – 28, the limitation of claims 6, 14, 19, and 27 – 28 ***are identical to claim 1 above***,” and “therefore, claims 6, 14, 19 and 27 – 28 are treated with respect to grounds as set forth for claim 1 above.” (*Emphasis added*, Office Action, pg. 6). Applicants respectfully disagree that claim 6 is “identical to claim 1.” Rather, unlike claim 1, claim 6 is directed to “a method for manipulating a graphical display of a printed circuit board model, the printed circuit board model adapted to be used in an automated x-ray inspection system for detecting defects in a manufactured printed circuit board having one or more components comprising one or more pins soldered to the printed circuit board.” Further, unlike claim 1, claim 6 recites “providing a graphical user interface

comprising a first portion for ***providing a graphical display of a printed circuit board model comprising a plurality of image objects associated with a printed circuit board.***”

Accordingly, the rejection of claim 6 is deficient for not even alleging that these features are disclosed in *Rosenberg*. Furthermore, these features, not addressed in the rejection, are not disclosed, taught, or suggested in *Rosenberg*.

The method of claim 6 includes “***providing a graphical user interface comprising a first portion for providing a graphical display of a printed circuit board model comprising a plurality of image objects associated with a printed circuit board.***” Unlike the method for manipulating a graphical display of a printed circuit board model of claim 6, the force feedback system of *Rosenberg* recites only that “object 12 is rigidly coupled to board 72, which, for example, can be a circuit board etched with conductive materials.” (Col. 8, lines 58 – 59). *Rosenberg* further discloses that “board 72 and object 12 may thus be translated along axis X and/or axis Y, shown by arrows 78A and 78B and guided by guides 80, thus providing the object 12 with linear degrees of freedom.” (FIG. 2A, col. 8, lines 61 – 64). Thus, the alleged printed circuit board of *Rosenberg* is part of the mechanical force-feedback interface between an object (e.g. a computer mouse) and a host computer. In contrast to claim 6, the alleged printed circuit board is not for display in the GUI. In that *Rosenberg* does not disclose, teach, or suggest “providing a graphical user interface comprising a first portion for providing a graphical display of a printed circuit board model causing a plurality of image objects associated with a printed circuit board” as recited in claim 6, the rejection should be withdrawn and the claim allowed.

Additionally, *Rosenberg* does not teach, suggest, or disclose the step of “***displaying a target area containing the first image object selected***” as recited in the method of claim 6. The Office Action apparently equates an image object with “icons, pull-down menu items, and graphical buttons” as well as any other “images appearing on the display screen which the

user may select with a cursor to implement a function of an application program or operating system, such as displaying images, executing an application program, or performing another computer function.” (Office Action, pgs. 2 – 3). The Office Action further alleges that targets “are defined region in the GUI 2 which a cursor may be moved by the user that are associated with one or more forces and which are typically associated with graphical objects of a GUI.” (Office Action, pg. 2). Additionally, the Office Action alleges that “such targets can be associated with, for example, graphical objects such as icons, pull-down menu items, and graphical buttons,” and further alleges that “a target usually is defined as the exact dimensions of its associated graphical object, and is superimposed and ‘attached’ to its associated graphical object such that the target has a constant spatial position with respect to the graphical object.” (Office Action, pg. 2).

Despite the Office Action’s detailed explanation as to the definition of “a target area,” Applicants submit that even assuming, *arguendo*, that a target area is as alleged, *Rosenberg* does not disclose that such a target area is ***displayed*** as required by the claim language. Rather, *Rosenberg* discloses, at most that “ ‘***targets, as referenced herein are defined regions in the GUI 300***’ to which a cursor may be moved by the user that are associated with one or more forces and which are typically associated with graphical objects of GUI 300.” (*Emphasis added*, col. 14, lines 38 – 41). A “region in the GUP” is not equivalent to “displaying a target area.”

Further, Applicants claim 6 recites “displaying a target area ***containing the first image object selected.***” Thus, “the first image object” and “the target area” are two separate elements, and the target area is “containing the first image object selected.” Therefore, it would be improper for the Office Action to allege that a single element in the *Rosenberg* reference, such as an icon, is equivalent to both “a first image object” and “a target area.”

Therefore, *Rosenberg* does not teach, suggest, or disclose the step of “displaying a target area containing the first image object selected” as recited in claim 6.

Claim 6 is patentable over *Rosenberg* for at least the additional reason that *Rosenberg* does not teach, suggest, or disclose the step of “***modifying the displayed target area such that the target area contains the first and second image objects.***” As an initial matter, as discussed above, *Rosenberg* does not even disclose a “displayed target area.” Rather, the alleged targets are merely “associated” with a displayed icon.

Even assuming, *arguendo*, that *Rosenberg* does disclose a “displayed target area,” *Rosenberg* simply does not disclose “***modifying the displayed target area***” at all. Rather, the alleged target “is superimposed and ‘attached’ to its associated graphical object such that the target has a ***constant spatial position*** with respect to the graphical object.” (*Emphasis added*, col. 14, lines 46-48).

Even more, assuming, *arguendo*, that *Rosenberg* does disclose “modifying the displayed target area,” *Rosenberg* does not disclose that the displayed target area is modified “such that the target area ***contains the first and second image objects***” as recited in claim 6. Thus, *Rosenberg* does not disclose, teach, or suggest “modifying the displayed target area such that the target area contains the first and second image objects” as recited in claim 6.

Accordingly, and for at least these reasons, Applicants respectfully submit that independent claim 6 defines over *Rosenberg*, and therefore, should be allowed. Furthermore, because independent claim 6 is allowable over the prior art of record, dependent claims 7 – 13 are allowable as a matter of law for at least the reason that they contain all the features and elements of independent claim 6.

Dependent Claim 7

The method of claim 7 recites that “*the step of modifying the displayed target area comprises centering the target area with respect to the first and second image objects selected.*” The Office Action directs the Applicants to column 14, lines 34 – 63 of *Rosenberg* as disclosing the alleged claim elements. However, Applicants have closely reviewed this section of text, as well as the remainder of the text of *Rosenberg*, and have not found anything that corresponds to “centering the target area with respect to the first and second image objects selected” as recited in claim 7.

At most, *Rosenberg* discloses that “the entire screen or background of GUI 300 can also be considered a ‘target’ which may provide forces on user object 12.” (Col. 14, lines 60 – 62). However, even if the entire screen or background is considered to be equivalent to a target, *Rosenberg* simply does not disclose that the entire screen or background is centered “with respect to first and second image objects selected.” Thus, *Rosenberg* does not disclose, teach, or suggest that “the step of modifying the displayed target area comprises centering the target area with respect to the first and second image objects selected” as recited in claim 7. Accordingly, and for at least these reasons, Applicants respectfully submit that dependent claim 7 defines over *Rosenberg* and, therefore, should be allowed.

Dependent Claim 8

Dependent claim 8 further defines that “*the step of modifying the displayed target area comprises displaying the target area such that the first and second image objects are contained within the target area and a maximum number of the image objects not selected are contained in the target area.*” As an initial matter, as discussed above in relation to claim 6, *Rosenberg* does not disclose “modifying the displayed target area,” and the claim should be allowed for this reason alone.

Further, the Office Action directs the Applicants to col. 14, lines 34 - col. 15, line 7 of *Rosenberg* as disclosing the alleged elements of claim 8. However, Applicants have closely reviewed this section of text, as well as the remainder of the text of *Rosenberg*, and have not found anything that corresponds to “the step of modifying the displayed target area comprises displaying the target area such that the first and second image objects are contained within the target area and a maximum number of the image objects not selected are contained in the target area” as recited in claim 8. Accordingly, and for at least these reasons, Applicants respectfully submit that dependent claim 8 defines over *Rosenberg* and, therefore, should be allowed.

Dependent Claim 9

Dependent claim 9 recites that “***at least one of the plurality of image objects comprises a family object that specifies a type of solder joint.***” However, *Rosenberg* discloses, at most, that “in the GUI context, ‘graphical objects’ are those images appearing on a display screen which the user may select with a cursor to implement a function of an application program or operating system, such as displaying images, executing an application program, or performing another computer function.” (Col. 14, lines 48 – 54). The recited language is simply not equivalent to “a family object that specifies a type of solder joint” as recited in claim 9. Thus, *Rosenberg* does not disclose, teach, or suggest that “at least one of the plurality of image objects comprises a family object that specifies a type of solder joint,” and for this reason, the rejection to dependent claim 9 should be withdrawn.

Dependent Claim 10

Dependent claim 10 recites that “***at least one of the plurality of image objects comprises a package object that specifies a type of component.***” However, *Rosenberg* discloses, at most, that “in the GUI context, ‘graphical objects’ are those images appearing on

a display screen which the user may select with a cursor to implement a function of an application program or operating system, such as displaying images, executing an application program, or performing another computer function.” (Col. 14, lines 48 – 54). The recited language is simply not equivalent to “a package object that specifies a type of component” as recited in claim 10. Thus, *Rosenberg* does not disclose, teach, or suggest that “at least one of the plurality of image objects comprises a package object that specifies a type of component,” and for this reason, the rejection to dependent claim 10 should be withdrawn.

Dependent Claim 11

Dependent claim 11 recites that “*at least one of the plurality of image objects comprises a pin object that specifies a unique pin number for a specific component in the printed circuit board.*” However, *Rosenberg* discloses, at most, that “in the GUI context, ‘graphical objects’ are those images appearing on a display screen which the user may select with a cursor to implement a function of an application program or operating system, such as displaying images, executing an application program, or performing another computer function.” (Col. 14, lines 48 – 54). The recited language is simply not equivalent to “a pin object that specifies a unique pin number for a specific component in the printed circuit board” as recited in claim 11. Thus, *Rosenberg* does not disclose, teach, or suggest that “at least one of the plurality of image objects comprises a pin object that specifies a unique pin number for a specific component in the printed circuit board,” and for this reason, the rejection to dependent claim 11 should be withdrawn.

Independent Claim 14

Independent claim 14 is patentable over *Rosenberg* for at least the reason that *Rosenberg* fails to disclose, teach or suggest each and every limitation of claim 14.

For example, *Rosenberg* does not teach, suggest, or disclose logic configured to “**display a target area containing the first image object selected**” as recited in claim 14. The Office Action apparently equates an image object with “icons, pull-down menu items, and graphical buttons” as well as any other “images appearing on the display screen which the user may select with a cursor to implement a function of an application program or operating system, such as displaying images, executing an application program, or performing another computer function.” (Office Action, pgs. 2 – 3). The Office Action further alleges that targets “are defined region in the GUI 2 which a cursor may be moved by the user that are associated with one or more forces and which are typically associated with graphical objects of a GUI.” (Office Action, pg. 2). Additionally, the Office Action alleges that “such targets can be associated with, for example, graphical objects such as icons, pull-down menu items, and graphical buttons,” and further alleges that “a target usually is defined as the exact dimensions of its associated graphical object, and is superimposed and ‘attached’ to its associated graphical object such that the target has a constant spatial position with respect to the graphical object.” (Office Action, pg. 2).

Despite the Office Action’s detailed explanation as to the definition of “a target area,” Applicants submit that even assuming, *arguendo*, that a target area is as alleged, *Rosenberg* does not disclose that such a target area is **displayed** as required by the claim language. Rather, *Rosenberg* discloses, at most that “**‘targets,’ as referenced herein are defined regions in the GUI 300** to which a cursor may be moved by the user that are associated with one or more forces and which are typically associated with graphical objects of GUI 300.” (*Emphasis added*, col. 14, lines 38 – 41). A “region in the GUI” is not equivalent to “displaying a target area.”

Further, claim 14 recites logic configured to “display a target area **containing the first image object selected**.” Thus, “the first image object” and “the target area” are two separate

elements, and the target area is “containing the first image object selected.” Therefore, it would be improper for the Office Action to allege that a single element in the *Rosenberg* reference, such as an icon, is equivalent to both “a first image object” and “a target area.” Therefore, *Rosenberg* does not teach, suggest, or disclose the step of “displaying a target area containing the first image object selected” as recited in claim 14.

Claim 14 is patentable over *Rosenberg* for at least the additional reason that *Rosenberg* does not teach, suggest, or disclose logic configured to “**modify the displayed target area such that the target area contains the first and second image objects.**” As an initial matter, as discussed above, *Rosenberg* does not even disclose a “displayed target area.” Rather, the alleged targets are merely “associated” with a displayed icon.

Even assuming, *arguendo*, that *Rosenberg* does disclose a “displayed target area,” *Rosenberg* simply does not disclose logic configured to “**modify the displayed target area**” *at all*. Rather, the alleged target “is superimposed and ‘attached’ to its associated graphical object such that the target has a **constant spatial position** with respect to the graphical object.” (*Emphasis added*, col. 14, lines 46-48).

Even more, assuming, *arguendo*, that *Rosenberg* does disclose logic configured to “modify the displayed target area,” *Rosenberg* does not disclose that the displayed target area is modified “such that the target area **contains the first and second image objects**” as recited in claim 14. Thus, *Rosenberg* does not disclose, teach, or suggest logic configured to “modify the displayed target area such that the target area contains the first and second image objects” as recited in claim 14.

Accordingly, and for at least these reasons, Applicants respectfully submit that independent claim 14 defines over *Rosenberg*, and therefore, should be allowed. Furthermore, because independent claim 14 is allowable over the prior art of record,

dependent claims 15 – 18 are allowable as a matter of law for at least the reason that they contain all the features and elements of independent claim 14.

Dependent Claim 15

Claim 15 recites that “*the logic is further configured to modify the displayed target area by centering the target area with respect to the first and second image objects selected.*” The Office Action directs the Applicants to column 14, lines 34 – 63 of *Rosenberg* as disclosing the alleged claim elements. However, Applicants have closely reviewed this section of text, as well as the remainder of the text of *Rosenberg*, and have not found anything that corresponds to “centering the target area with respect to the first and second image objects selected” as recited in claim 15.

At most, *Rosenberg* discloses that “the entire screen or background of GUI 300 can also be considered a ‘target’ which may provide forces on user object 12.” (Col. 14, lines 60 – 62). However, even if the entire screen or background is considered to be equivalent to a target, *Rosenberg* simply does not disclose that the entire screen or background is centered “with respect to first and second image objects selected.” Thus, *Rosenberg* does not disclose, teach, or suggest that “*the logic is further configured to modify the displayed target area by centering the target area with respect to the first and second image objects selected*” as recited in claim 15. Accordingly, and for at least these reasons, Applicants respectfully submit that dependent claim 15 defines over *Rosenberg* and, therefore, should be allowed.

Dependent Claim 16

Dependent claim 16 further defines that “*the logic is further configured to modify the displayed target area by displaying the target area such that the first and second image objects are contained within the target area and a maximum number of the image objects not selected are contained in the target area.*” As an initial matter, as discussed above in

relation to claim 14, *Rosenberg* does not disclose that the logic is configured to “modify the displayed target area,” and the claim should be allowed for this reason alone.

Further, the Office Action directs the Applicants to col. 14, lines 34 - col. 15, line 7 of *Rosenberg* as disclosing the alleged elements of claim 16. However, Applicants have closely reviewed this section of text, as well as the remainder of the text of *Rosenberg*, and have not found anything that corresponds to “logic configured to modify the displayed target area by displaying the target area such that the first and second image objects are contained within the target area and a maximum number of the image objects not selected are contained in the target area” as recited in claim 16. Accordingly, and for at least these reasons, Applicants respectfully submit that dependent claim 16 defines over *Rosenberg* and, therefore, should be allowed.

Independent Claim 19

Applicants submit that *Rosenberg* does not disclose, teach, or suggest, *and the Office Action has not even alleged Rosenberg discloses*, each and every element of independent claim 19.

As an initial matter, Applicants submit that the Office Action has ***not even alleged that each and every element of independent claim 19*** is disclosed in *Rosenberg*. The Office Action alleges that “RE claims 6, 14, 19, and 27 – 28, the limitation of claims 6, 14, 19, and 27 – 28 ***are identical to claim 1 above***,” and “therefore, claims 6, 14, 19 and 27 – 28 are treated with respect to grounds as set forth for claim 1 above.” (*Emphasis added*, Office Action, pg. 6). Applicants respectfully disagree that claim 19 is “identical to claim 1.” Rather, unlike claim 1, claim 19 is directed to “a computer-program embodied in a computer-readable medium for manipulating a graphical display of a printed circuit board model, the printed circuit board model adapted to be used in an automated x-ray inspection system for

detecting defects in a manufactured printed circuit board having one or more components comprising one or more pins soldered to the printed circuit board.” Further, unlike claim 1, claim 19 includes logic configured to “provide a graphical user interface comprising a first portion for *providing a graphical display of a printed circuit board model comprising a plurality of image objects associated with a printed circuit board.*” Accordingly, the rejection of claim 19 is deficient for not even alleging that these features are disclosed in *Rosenberg*. Furthermore, these features, not addressed in the rejection, are not disclosed, taught, or suggested in *Rosenberg*.

The computer program of claim 19 includes logic configured to “*provide a graphical user interface comprising a first portion for providing a graphical display of a printed circuit board model comprising a plurality of image objects associated with a printed circuit board.*” Unlike the method for manipulating a graphical display of a printed circuit board model of claim 19, the force feedback system of *Rosenberg* recites only that “object 12 is rigidly coupled to board 72, which, for example, can be a circuit board etched with conductive materials.” (Col. 8, lines 58 – 59). *Rosenberg* further discloses that “board 72 and object 12 may thus be translated along axis X and/or axis Y, shown by arrows 78A and 78B and guided by guides 80, thus providing the object 12 with linear degrees of freedom.” (FIG. 2A, col. 8, lines 61 – 64). Thus, the alleged printed circuit board of *Rosenberg* is part of the mechanical force-feedback interface between an object (e.g. a computer mouse) and a host computer. In contrast to claim 19, the alleged printed circuit board is not for display in the GUI. In that *Rosenberg* does not disclose, teach, or suggest logic configured to “provide a graphical user interface comprising a first portion for providing a graphical display of a printed circuit board model causing a plurality of image objects associated with a printed circuit board” as recited in claim 19, the rejection should be withdrawn and the claim allowed.

Additionally, *Rosenberg* does not teach, suggest, or disclose logic configured to “**display a target area containing the first image object selected**” as recited in claim 19. The Office Action apparently equates an image object with “icons, pull-down menu items, and graphical buttons” as well as any other “images appearing on the display screen which the user may select with a cursor to implement a function of an application program or operating system, such as displaying images, executing an application program, or performing another computer function.” (Office Action, pgs. 2 – 3). The Office Action further alleges that targets “are defined region in the GUI 2 which a cursor may be moved by the user that are associated with one or more forces and which are typically associated with graphical objects of a GUI.” (Office Action, pg. 2). Additionally, the Office Action alleges that “such targets can be associated with, for example, graphical objects such as icons, pull-down menu items, and graphical buttons,” and further alleges that “a target usually is defined as the exact dimensions of its associated graphical object, and is superimposed and ‘attached’ to its associated graphical object such that the target has a constant spatial position with respect to the graphical object.” (Office Action, pg. 2).

Despite the Office Action’s detailed explanation as to the definition of “a target area,” Applicants submit that even assuming, *arguendo*, that a target area is as alleged, *Rosenberg* does not disclose that such a target area is **displayed** as required by the claim language. Rather, *Rosenberg* discloses, at most that “**‘targets,’ as referenced herein are defined regions in the GUI 300** to which a cursor may be moved by the user that are associated with one or more forces and which are typically associated with graphical objects of GUI 300.” (*Emphasis added*, col. 14, lines 38 – 41). A “region in the GUI” is not equivalent to “displaying a target area.”

Further, Applicants have claimed logic configured to “display a target area **containing the first image object selected**.” Thus, “the first image object” and “the target area” are two

separate elements, and the target area is “containing the first image object selected.” Therefore, it would be improper for the Office Action to allege that a single element in the *Rosenberg* reference, such as an icon, is equivalent to both “a first image object” and “a target area.” Therefore, *Rosenberg* does not teach, suggest, or disclose a computer readable medium configured to “display a target area containing the first image object selected” as recited in claim 19.

Claim 19 is patentable over *Rosenberg* for at least the additional reason that *Rosenberg* does not teach, suggest, or disclose logic configured to “***modify the displayed target area such that the target area contains the first and second image objects.***” As an initial matter, as discussed above, *Rosenberg* does not even disclose a “displayed target area.” Rather, the alleged targets are merely “associated” with a displayed icon.

Even assuming, *arguendo*, that *Rosenberg* does disclose a “displayed target area,” *Rosenberg* simply does not disclose logic configured to “***modify the displayed target area***” at all. Rather, the alleged target “is superimposed and ‘attached’ to its associated graphical object such that the target has a ***constant spatial position*** with respect to the graphical object.” (*Emphasis added*, col. 14, lines 46-48).

Even more, assuming, *arguendo*, that *Rosenberg* does disclose logic configured to “modify the displayed target area,” *Rosenberg* does not disclose that the displayed target area is modified “such that the target area ***contains the first and second image objects***” as recited in claim 19. Thus, *Rosenberg* does not disclose, teach, or suggest logic configured to “modify the displayed target area such that the target area contains the first and second image objects” as recited in claim 19.

Accordingly, and for at least these reasons, Applicants respectfully submit that independent claim 19 defines over *Rosenberg*, and therefore, should be allowed. Furthermore, because independent claim 19 is allowable over the prior art of record,

dependent claims 20 – 26 are allowable as a matter of law for at least the reason that they contain all the features and elements of independent claim 19.

Dependent Claim 20

Claim 20 recites that “***the logic is further configured to modify the displayed target area by centering the target area with respect to the first and second image objects selected.***” The Office Action directs the Applicants to column 14, lines 34 – 63 of *Rosenberg* as disclosing the alleged claim elements. However, Applicants have closely reviewed this section of text, as well as the remainder of the text of *Rosenberg*, and have not found anything that corresponds to “centering the target area with respect to the first and second image objects selected” as recited in claim 20.

At most, *Rosenberg* discloses that “the entire screen or background of GUI 300 can also be considered a ‘target’ which may provide forces on user object 12.” (Col. 14, lines 60 – 62). However, even if the entire screen or background is considered to be equivalent to a target, *Rosenberg* simply does not disclose that the entire screen or background is centered “with respect to first and second image objects selected.” Thus, *Rosenberg* does not disclose, teach, or suggest that “***the logic is further configured to modify the displayed target area by centering the target area with respect to the first and second image objects selected***” as recited in claim 20. Accordingly, and for at least these reasons, Applicants respectfully submit that dependent claim 20 defines over *Rosenberg* and, therefore, should be allowed.

Dependent Claim 21

Dependent claim 21 further defines that “the logic is further configured to ***modify the displayed target area comprises displaying the target area such that the first and second image objects are contained within the target area and a maximum number of the image objects not selected are contained in the target area.***” As an initial matter, as discussed

above in relation to claim 19, *Rosenberg* does not disclose logic configured to “modify the displayed target area,” and claim 21 should be allowed for this reason alone.

Further, the Office Action directs the Applicants to col. 14, lines 34 - col. 15, line 7 of *Rosenberg* as disclosing the alleged elements of claim 21. However, Applicants have closely reviewed this section of text, as well as the remainder of the text of *Rosenberg*, and have not found anything that corresponds to “the logic is further configured to modify the displayed target area comprises displaying the target area such that the first and second image objects are contained within the target area and a maximum number of the image objects not selected are contained in the target area” as recited in claim 21. Accordingly, and for at least these reasons, Applicants respectfully submit that dependent claim 21 defines over *Rosenberg* and, therefore, should be allowed.

Dependent Claim 22

Dependent claim 22 recites that “*at least one of the plurality of image objects corresponds to a solder joint.*” However, *Rosenberg* discloses, at most, that “in the GUI context, ‘graphical objects’ are those images appearing on a display screen which the user may select with a cursor to implement a function of an application program or operating system, such as displaying images, executing an application program, or performing another computer function.” (Col. 14, lines 48 – 54). The recited language is simply not equivalent a solder joint” as recited in claim 22. Thus, *Rosenberg* does not disclose, teach, or suggest that “at least one of the plurality of image objects corresponds to a solder joint,” and for this reason, the rejection to dependent claim 22 should be withdrawn.

Dependent Claim 23

Dependent claim 10 recites that “*at least one of the plurality of image objects corresponds to a type of component.*” However, *Rosenberg* discloses, at most, that “in the

GUI context, ‘graphical objects’ are those images appearing on a display screen which the user may select with a cursor to implement a function of an application program or operating system, such as displaying images, executing an application program, or performing another computer function.” (Col. 14, lines 48 – 54). The recited language is simply not equivalent to “a type of component” as recited in claim 23. Thus, *Rosenberg* does not disclose, teach, or suggest that “at least one of the plurality of image objects corresponds to a component,” and for at least this reason, the rejection to dependent claim 23 should be withdrawn.

Dependent Claim 24

Dependent claim 24 recites that “*at least one of the plurality of image objects corresponds to a pin.*” However, *Rosenberg* discloses, at most, that “in the GUI context, ‘graphical objects’ are those images appearing on a display screen which the user may select with a cursor to implement a function of an application program or operating system, such as displaying images, executing an application program, or performing another computer function.” (Col. 14, lines 48 – 54). The recited language is simply not equivalent to “a pin” as recited in claim 24. Thus, *Rosenberg* does not disclose, teach, or suggest that “at least one of the plurality of image objects corresponds to a pin,” and for this reason, the rejection to dependent claim 24 should be withdrawn.

Independent Claim 27

Applicants submit that *Rosenberg* does not disclose, teach, or suggest, *and the Office Action has not even alleged Rosenberg discloses*, each and every element of independent claim 27.

As an initial matter, Applicants submit that the Office Action has *not even alleged that each and every element of independent claim 27* is disclosed in *Rosenberg*. The Office Action alleges that “RE claims 6, 14, 19, and 27 – 28, the limitation of claims 6, 14, 19, and

27 – 28 *are identical to claim 1 above*,” and “therefore, claims 6, 14, 19 and 27 – 28 are treated with respect to grounds as set forth for claim 1 above.” (*Emphasis added*, Office Action, pg. 6). Applicants respectfully disagree that claim 27 is “identical to claim 1.” Rather, unlike claim 1, claim 27 is directed to “a system for manipulating a graphical display of a printed circuit board model, the printed circuit board model adapted to be used in an automated x-ray inspection system for detecting defects in a manufactured printed circuit board having one or more components comprising one or more pins soldered to the printed circuit board.” Further, unlike claim 1, claim 27 recites “*means for providing a graphical user interface comprising a first portion for providing a graphical display of a printed circuit board model comprising a plurality of image objects associated with a printed circuit board*,” and a “*means for displaying a target area such that the target area contains one or more image objects selected and a maximum number of the image objects not selected are contained in the target area*.” Accordingly, the rejection of claim 27 is deficient for not even alleging that these features are disclosed in *Rosenberg*. Furthermore, these features, not addressed in the rejection, are not disclosed, taught, or suggested in *Rosenberg*.

As a separate and independent basis for patentability, claim 27 sets forth elements using means-plus-function language. Pursuant to 35 U.S.C. § 112(6), a claim element recited in means-plus-function format “shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.” 35 U.S.C. § 112, ¶ 6. The Federal Circuit has clearly endorsed this statutory mandate by holding that claims interpreted under 35 U.S.C. § 112, paragraph 6, are limited to the corresponding structure disclosed in the specification and its equivalents. *Kahn v. General Motors Corp.*, 135 F.3d 1472, 45 U.S.P.Q.2d 1608 (Fed. Cir. 1998).

There should be no question but that the elements recited in claim 27 are to be construed pursuant to 35 U.S.C. § 112, paragraph 6. In *Greenberg v. Ethicon Endo-Surgical*

Inc., 91 F.3d 1580, 39 U.S.P.Q. 2d 1783 (Fed. Cir. 1996), the Federal Circuit stated that the use of “means for” language generally invokes 112(6). Indeed, only if means-plus-function claim elements recite sufficient structure to carry out the function are that taken out of the gambit of 35 U.S.C. § 112, paragraph 6. *Cole v. Kimberly-Clark Corp.*, 102 F.3d 524, 41 U.S.P.Q.2d 1001 (Fed. Cir. 1996).

Indeed, the Federal Circuit reiterated in *Sage Products, Inc. v. Devon Industries, Inc.*, 126 F.3d 1420, 44 U.S.P.Q.2d 1103 (Fed. Cir. 1998) that “the use of the word ‘means,’ which is part of the classic template for functional claim elements, gives rise to ‘a presumption that the inventor used the term advisedly to invoke the statutory mandates for means-plus-function clauses.” Ultimately, the Court in *Sage* construed the relevant claim elements under 35 U.S.C. § 112(6), because ‘means’ were recited, and the claim elements did not “explicitly recite[s] the structure, material, or acts needed to perform the [recited] functions. *Sage* at p. 1428. The Federal Circuit further acknowledged this presumption in *Al-Site Corp. v. VSI International, Inc.*, 174 F.3d 1308, 50 U.S.P.Q.2d 1161 (Fed. Cir. 1999).

Thus, claim elements expressed in “means” plus function format are construed in accordance with 35 U.S.C. § 112, paragraph 6, as set forth above, and as further described in *In re Donaldson* 16 F.3d 1189, 29 U.S.P.Q.2d 1845 (Fed. Cir. 1994)(*en banc*). Therefore, the various “means” elements must be construed in accordance with the structure set forth in the present specification. In this regard, Applicants note that, in *In re Donaldson*, The Board of Patent Appeals and Interferences advanced the legal proposition that “limitations appearing in the specification are *not* to be read into the claims of an application.” *In re Donaldson* at 1848. This argument, however, was rejected by the Federal Circuit, which held, as a matter of law, that “one construing means-plus-function language in a claim must look to the specification and interpret that language in light of the corresponding structure ... described therein, and equivalents thereof. *In re Donaldson* at 1848. Furthermore, the holding in *In re*

Donaldson does not conflict with the principle that claims are to be given their broadest reasonable interpretation during prosecution. *In re Donaldson* at 1850.

The means-plus-function elements of claim 27 must be construed differently than the corresponding elements of the other claims. Therefore, the rejection of claim 1, for example, does not necessarily apply to claim 27. The Office Action, however, failed to differentiate the elements in this way. For at least this additional reason, Applicants submit that the rejection of claim 27 is improper and should be overturned, as the rejection is incomplete and legally deficient.

In addition, the corresponding structure disclosed in the present specification that corresponds to the various means elements is distinct from that disclosed in the cited patents. For at least this additional reason, Applicants submit that the rejection of claim 27 should be overturned, as claim 27 patently defines over *Rosenberg*.

For example, the system of claim 27 includes “***means for providing a graphical user interface comprising a first portion for providing a graphical display of a printed circuit board model comprising a plurality of image objects associated with a printed circuit board.***” Unlike the system for manipulating a graphical display of a printed circuit board model of claim 27, the force feedback system of *Rosenberg* recites only that “object 12 is rigidly coupled to board 72, which, for example, can be a circuit board etched with conductive materials.” (Col. 8, lines 58 – 59). *Rosenberg* further discloses that “board 72 and object 12 may thus be translated along axis X and/or axis Y, shown by arrows 78A and 78B and guided by guides 80, thus providing the object 12 with linear degrees of freedom.” (FIG. 2A, col. 8, lines 61 – 64). Thus, the alleged printed circuit board of *Rosenberg* is part of the mechanical force-feedback interface between an object (e.g. a computer mouse) and a host computer. In contrast to claim 27, the alleged printed circuit board is not for display in the GUI. In that *Rosenberg* does not disclose, teach, or suggest “means for providing a

graphical user interface comprising a first portion for providing a graphical display of a printed circuit board model causing a plurality of image objects associated with a printed circuit board” as recited in claim 27, the rejection should be withdrawn and the claim allowed.

Additionally, *Rosenberg* does not teach, suggest, or disclose “means for ***displaying a target area such that the target area contains one or more image objects selected and a maximum number of the image objects not selected are contained in the target area***” as recited in the system of claim 27. The Office Action apparently equates an image object with “icons, pull-down menu items, and graphical buttons” as well as any other “images appearing on the display screen which the user may select with a cursor to implement a function of an application program or operating system, such as displaying images, executing an application program, or performing another computer function.” (Office Action, pgs. 2 – 3). The Office Action further alleges that targets “are defined region in the GUI 2 which a cursor may be moved by the user that are associated with one or more forces and which are typically associated with graphical objects of a GUI.” (Office Action, pg. 2). Additionally, the Office Action alleges that “such targets can be associated with, for example, graphical objects such as icons, pull-down menu items, and graphical buttons,” and further alleges that “a target usually is defined as the exact dimensions of its associated graphical object, and is superimposed and ‘attached’ to its associated graphical object such that the target has a constant spatial position with respect to the graphical object.” (Office Action, pg. 2).

Despite the Office Action’s detailed explanation as to the definition of “a target area,” Applicants submit that even assuming, *arguendo*, that a target area is as alleged, *Rosenberg* does not disclose that such a target area is ***displayed*** as required by the claim language. Rather, *Rosenberg* discloses, at most that “ ‘***targets, as referenced herein are defined regions in the GUI 300***’ to which a cursor may be moved by the user that are associated with

one or more forces and which are typically associated with graphical objects of GUI 300.” (*Emphasis added*, col. 14, lines 38 – 41). A “region in the GUI” is not equivalent to “displaying a target area.”

Further, Applicants claim 27 recites “displaying a target area *containing the first image object selected*.” Thus, “the first image object” and “the target area” are two separate elements, and the target area is “containing the first image object selected.” Therefore, it would be improper for the Office Action to allege that a single element in the *Rosenberg* reference, such as an icon, is equivalent to both “a first image object” and “a target area.” Therefore, *Rosenberg* does not teach, suggest, or disclose the step of “displaying a target area containing the first image object selected” as recited in claim 27.

Claim 27 is patentable over *Rosenberg* for at least the additional reason that *Rosenberg* does not teach, suggest, or disclose means for “*displaying a target area such that the target area contains one or more image objects selected and a maximum number of the image objects not selected are contained in the target area*.” As an initial matter, as discussed above, *Rosenberg* does not even disclose a “displayed target area.” Rather, the alleged targets are merely “associated” with a displayed icon.

Even more, assuming, *arguendo*, that *Rosenberg* does disclose “a displayed target area,” *Rosenberg* does not disclose displaying the target area “such that the target area *contains the one or more image objects selected and a maximum number of the image objects not selected are contained in the target area*” as recited in claim 27. The Office Action directs the Applicants to col. 14, lines 34 - col. 15, line 7 of *Rosenberg*. However, Applicants have closely reviewed this section of text, as well as the remainder of the text of *Rosenberg*, and have not found anything that corresponds to a “means for displaying a target area such that the target area contains one or more image objects selected and a maximum

number of the image objects not selected are contained in the target area” as recited in claim 27.

Accordingly, Applicants submit that the rejection of claim 27 is legally deficient and improper as a matter of law, and for at least these reasons, the rejection of claim 27 should be withdrawn.

Independent Claim 28

Applicants submit that *Rosenberg* does not disclose, teach, or suggest, *and the Office Action has not even alleged Rosenberg discloses*, each and every element of independent claim 28.

As an initial matter, Applicants submit that the Office Action has ***not even alleged that each and every element of independent claim 28*** is disclosed in *Rosenberg*. The Office Action alleges that “RE claims 6, 14, 19, and 27 – 28, the limitation of claims 6, 14, 19, and 27 – 28 ***are identical to claim 1 above***,” and “therefore, claims 6, 14, 19 and 27 – 28 are treated with respect to grounds as set forth for claim 1 above.” (*Emphasis added*, Office Action, pg. 6). Applicants respectfully disagree that claim 28 is “identical to claim 1.” Rather, unlike claim 1, claim 28 is directed to “A system for manipulating a graphical display of a printed circuit board model, the printed circuit board model adapted to be used in an automated x-ray inspection system for detecting defects in a manufactured printed circuit board having one or more components comprising one or more pins soldered to the printed circuit board.” Further, unlike claim 1, claim 28 includes logic configured to “provide a graphical user interface comprising a first portion for ***providing a graphical display of a printed circuit board model comprising a plurality of image objects associated with a printed circuit board***.” These features simply are not recited in independent claim 1, and the rejection of claim 28 is deficient for not even alleging that these features are disclosed in

Rosenberg. Furthermore, these features, not addressed in the rejection, are not disclosed, taught, or suggested in *Rosenberg*.

The computer program of claim 28 includes logic configured to “***provide a graphical user interface comprising a first portion for providing a graphical display of a printed circuit board model comprising a plurality of image objects associated with a printed circuit board.***” Unlike the method for manipulating a graphical display of a printed circuit board model of claim 28, the force feedback system of *Rosenberg* recites only that “object 12 is rigidly coupled to board 72, which, for example, can be a circuit board etched with conductive materials.” (Col. 8, lines 58 – 59). *Rosenberg* further discloses that “board 72 and object 12 may thus be translated along axis X and/or axis Y, shown by arrows 78A and 78B and guided by guides 80, thus providing the object 12 with linear degrees of freedom.” (FIG. 2A, col. 8, lines 61 – 64). Thus, the alleged printed circuit board of *Rosenberg* is part of the mechanical force-feedback interface between an object (e.g. a computer mouse) and a host computer. In contrast to claim 28, the alleged printed circuit board is not for display in the GUI. In that *Rosenberg* does not disclose, teach, or suggest logic configured to “provide a graphical user interface comprising a first portion for providing a graphical display of a printed circuit board model causing a plurality of image objects associated with a printed circuit board” as recited in claim 28, the rejection should be withdrawn and the claim allowed.

Additionally, *Rosenberg* does not teach, suggest, or disclose logic configured to “***display a target area containing the first image object selected***” as recited in claim 28. The Office Action apparently equates an image object with “icons, pull-down menu items, and graphical buttons” as well as any other “images appearing on the display screen which the user may select with a cursor to implement a function of an application program or operating system, such as displaying images, executing an application program, or performing another

computer function.” (Office Action, pgs. 2 – 3). The Office Action further alleges that targets “are defined region in the GUI 2 which a cursor may be moved by the user that are associated with one or more forces and which are typically associated with graphical objects of a GUI.” (Office Action, pg. 2). Additionally, the Office Action alleges that “such targets can be associated with, for example, graphical objects such as icons, pull-down menu items, and graphical buttons,” and further alleges that “a target usually is defined as the exact dimensions of its associated graphical object, and is superimposed and ‘attached’ to its associated graphical object such that the target has a constant spatial position with respect to the graphical object.” (Office Action, pg. 2).

Despite the Office Action’s detailed explanation as to the definition of “a target area,” Applicants submit that even assuming, *arguendo*, that a target area is as alleged, *Rosenberg* does not disclose that such a target area is ***displayed*** as required by the claim language. Rather, *Rosenberg* discloses, at most that “ ‘***targets, as referenced herein are defined regions in the GUI 300***’ to which a cursor may be moved by the user that are associated with one or more forces and which are typically associated with graphical objects of GUI 300.” (*Emphasis added*, col. 14, lines 38 – 41). A “region in the GUI” is not equivalent to “displaying a target area.”

Further, Applicants have claimed logic configured to “display a target area ***containing the first image object selected.***” Thus, “the first image object” and “the target area” are two separate elements, and the target area is “containing the first image object selected.” Therefore, it would be improper for the Office Action to allege that a single element in the *Rosenberg* reference, such as an icon, is equivalent to both “a first image object” and “a target area.” Therefore, *Rosenberg* does not teach, suggest, or disclose a computer readable medium configured to “display a target area containing the first image object selected” as recited in claim 28.

Claim 28 is patentable over *Rosenberg* for at least the additional reason that *Rosenberg* does not teach, suggest, or disclose logic configured to “**modify the displayed target area such that the target area contains the first and second image objects.**” As an initial matter, as discussed above, *Rosenberg* does not even disclose a “displayed target area.” Rather, the alleged targets are merely “associated” with a displayed icon.

Even assuming, *arguendo*, that *Rosenberg* does disclose a “displayed target area,” *Rosenberg* simply does not disclose logic configured to “**modify the displayed target area**” at all. Rather, the alleged target “is superimposed and ‘attached’ to its associated graphical object such that the target has a **constant spatial position** with respect to the graphical object.” (*Emphasis added*, col. 14, lines 46-48).

Even more, assuming, *arguendo*, that *Rosenberg* does disclose logic configured to “modify the displayed target area,” *Rosenberg* does not disclose that the displayed target area is modified “such that the target area **contains the first and second image objects**” as recited in claim 28. Thus, *Rosenberg* does not disclose, teach, or suggest logic configured to “modify the displayed target area such that the target area contains the first and second image objects” as recited in claim 28.

Accordingly, and for at least these reasons, Applicants respectfully submit that independent claim 28 defines over *Rosenberg*, and therefore, should be allowed. Furthermore, because independent claim 28 is allowable over the prior art of record, dependent claims 29 – 35 are allowable as a matter of law for at least the reason that they contain all the features and elements of independent claim 28.

Dependent Claim 29

Claim 29 recites that “**the logic is further configured to modify the displayed target area by centering the target area with respect to the first and second image objects**

selected.” The Office Action directs the Applicants to column 14, lines 34 – 63 of *Rosenberg* as disclosing the alleged claim elements. However, Applicants have closely reviewed this section of text, as well as the remainder of the text of *Rosenberg*, and have not found anything that corresponds to “centering the target area with respect to the first and second image objects selected” as recited in claim 29.

At most, *Rosenberg* discloses that “the entire screen or background of GUI 300 can also be considered a ‘target’ which may provide forces on user object 12.” (Col. 14, lines 60 – 62). However, even if the entire screen or background is considered to be equivalent to a target, *Rosenberg* simply does not disclose that the entire screen or background is centered “with respect to first and second image objects selected.” Thus, *Rosenberg* does not disclose, teach, or suggest that “*the logic is further configured to modify the displayed target area by centering the target area with respect to the first and second image objects selected*” as recited in claim 29. Accordingly, and for at least these reasons, Applicants respectfully submit that dependent claim 29 defines over *Rosenberg* and, therefore, should be allowed.

Dependent Claim 30

Dependent claim 30 further defines that “the logic is further configured to *modify the displayed target area comprises displaying the target area such that the first and second image objects are contained within the target area and a maximum number of the image objects not selected are contained in the target area.*” As an initial matter, as discussed above in relation to claim 28, *Rosenberg* does not disclose “logic configured to modify the displayed target area,” and the claim should be allowed for this reason alone.

Further, the Office Action directs the Applicants to col. 14, lines 34 - col. 15, line 7 of *Rosenberg* as disclosing the alleged elements of claim 30. However, Applicants have closely reviewed this section of text, as well as the remainder of the text of *Rosenberg*, and have not

found anything that corresponds to disclosing that “the logic is further configured to modify the displayed target area comprises displaying the target area such that the first and second image objects are contained within the target area and a maximum number of the image objects not selected are contained in the target area” as recited in claim 30. Accordingly, and for at least these reasons, Applicants respectfully submit that dependent claim 30 defines over *Rosenberg* and, therefore, should be allowed.

Dependent Claim 31

Dependent claim 31 recites that “***at least one of the plurality of image objects corresponds to a solder joint.***” However, *Rosenberg* discloses, at most, that “in the GUI context, ‘graphical objects’ are those images appearing on a display screen which the user may select with a cursor to implement a function of an application program or operating system, such as displaying images, executing an application program, or performing another computer function.” (Col. 14, lines 48 – 54). The recited language is simply not equivalent a solder joint” as recited in claim 31. Thus, *Rosenberg* does not disclose, teach, or suggest that “at least one of the plurality of image objects corresponds to a solder joint,” and for this reason, the rejection to dependent claim 31 should be withdrawn.

Dependent Claim 32

Dependent claim 32 recites that “***at least one of the plurality of image objects corresponds to a component.***” However, *Rosenberg* discloses, at most, that “in the GUI context, ‘graphical objects’ are those images appearing on a display screen which the user may select with a cursor to implement a function of an application program or operating system, such as displaying images, executing an application program, or performing another computer function.” (Col. 14, lines 48 – 54). The recited language is simply not equivalent to “a component” as recited in claim 32. Thus, *Rosenberg* does not disclose, teach, or suggest

that “at least one of the plurality of image objects corresponds to a component,” and for at least this reason, the rejection to dependent claim 32 should be withdrawn.

Dependent Claim 33

Dependent claim 33 recites that “*at least one of the plurality of image objects corresponds to a pin.*” However, *Rosenberg* discloses, at most, that “in the GUI context, ‘graphical objects’ are those images appearing on a display screen which the user may select with a cursor to implement a function of an application program or operating system, such as displaying images, executing an application program, or performing another computer function.” (Col. 14, lines 48 – 54). The recited language is simply not equivalent to “a pin” as recited in claim 33. Thus, *Rosenberg* does not disclose, teach, or suggest that “at least one of the plurality of image objects corresponds to a pin,” and for this reason, the rejection to dependent claim 33 should be withdrawn.

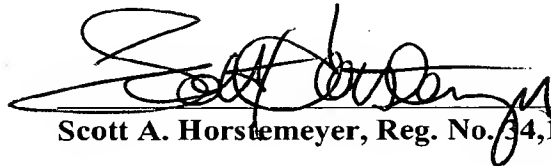
Dependent Claims 3-5, 8, 12-13, 18, 21, 25-26, 30 and 34-35

Applicants submit that the § 102(e) rejection to claims 3-5, 8, 12-13, 18, 21, 25-26, 30 and 34-35 is rendered moot in light of any other arguments made above and, therefore, the claims are allowable as a matter of law for at least the reason that claims 3-5, 8, 12-13, 18, 21, 25-26, 30 and 34-35 contain all the features and elements of their corresponding independent claim which Applicants believe to be allowable. For at least this reason, Applicants request that the rejection of claims 3-5, 8, 12-13, 18, 21, 25-26, 30 and 34-35 be withdrawn.

CONCLUSION

For at least the reasons set forth above, Applicants respectfully submit that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

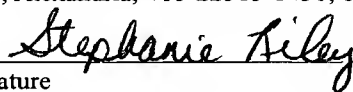
Respectfully submitted,


Scott A. Horstemeyer, Reg. No. 34,183

**THOMAS, KAYDEN,
HORSTEMEYER & RISLEY, L.L.P.**
100 Galleria Parkway N.W., Suite 1750
Atlanta, Georgia 30339
(770) 933-9500

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